

What is claimed is:

1. A belt force measuring device, comprising:
  - a measuring spring, the expansion of which is a measure of the belt force;
  - a detector which is arranged on the measuring spring rigidly to a first bearing of the measuring spring; and
  - a sensor element which is arranged on the measuring spring rigidly to a second bearing of the measuring spring, the measuring spring being arranged and formed such that it expands between the first and second bearing as a function of the belt force.
2. The belt force measuring device according to claim 1, wherein the measuring spring is arranged such that expansion as a function of the belt force is limited by a play of a locking tab mounted with the play in a housing of the belt force measuring device.
3. The belt force measuring device according to claim 1, wherein the measuring spring is mounted flexibly in the first and second bearing.
4. The belt force measuring device according to claim 1, wherein the detector is located on the measuring spring so that it cannot rotate.
5. The belt force measuring device according to claim 1, wherein the sensor element is located on the measuring spring so it that cannot rotate.
6. The belt force measuring device according to claim 1, wherein the measuring spring is formed from spring steel strip.